

LISTING OF THE CLAIMS

The listing of claims provided below is intended to replace all prior versions of the claims.

1. (Currently amended) A method of ~~treating hemophilia~~ expressing Factor IX in a mammal, comprising:

providing a preparation of recombinant adeno-associated virus (rAAV) ~~virions~~ virions lacking the components necessary to form replication competent adenovirus, said rAAV virions comprising an AAV-6 capsid ~~[[τ]]~~ and a heterologous nucleic acid encoding Factor IX, wherein said heterologous nucleic acid is operably linked to ~~expression~~ expression control elements; and

administering said preparation to at least one muscle cell of a mammal ~~wherein said Factor IX is expressed at levels having a therapeutic effect on said mammal, wherein said therapeutic effect is an increase in blood clotting efficiency in said mammal.~~

2. (Original) The method of claim 1, wherein said Factor IX is human Factor IX.

3. (Currently amended) A method of delivering a heterologous nucleic acid to at least one muscle cell in a mammalian subject, comprising:

(a) providing a preparation of recombinant adeno-associated virus (rAAV) virions lacking the components necessary to form replication competent adenovirus, said rAAV virions comprising an AAV-6 capsid and a heterologous

nucleic acid, wherein said heterologous nucleic acid is operably linked to expression control elements; and

(b) administering said preparation to said muscle cell, ~~whereby expression of said heterologous nucleic acid provides for a therapeutic effect.~~

4. (Previously presented) The method of claim 3, wherein said heterologous nucleic acid is a gene encoding a protein.

5. (Withdrawn) The method of claim 3, wherein said heterologous nucleic acid is an antisense RNA.

6. (Withdrawn) The method of claim 3, wherein said heterologous nucleic acid is a ribozyme.

7. (Original) The method of claim 4, wherein said protein is a secreted protein.

8. (Original) The method of claim 7, wherein said secreted protein is a blood coagulation factor.

9. (Original) The method of claim 8, wherein said blood coagulation factor is human factor IX.

10. (Canceled)

11. (Currently amended) The method of claim ~~40~~ 3, wherein said muscle cell is a skeletal muscle cell.

12. (Currently amended) The method of claim 3, wherein said administering of said ~~rAAV virions~~ preparation is by way of administration to a vascular conduit of said mammalian subject.

13. (Previously presented) The method of claim 12, wherein said vascular conduit is a vein.

14. (Previously presented) The method of claim 12, wherein said vascular conduit is an artery.

15. (Canceled).

16. (Currently amended) A method of expressing a heterologous nucleic acid in a mammalian subject, comprising:

(a) providing a preparation of recombinant adeno-associated virus (rAAV) virions lacking the components necessary to form replication competent adenovirus, said rAAV virions comprising an AAV-6 capsid and a heterologous nucleic acid, wherein said heterologous nucleic acid is operably linked to expression control elements; and

(b) administering said preparation to said subject, ~~whereby expression of said heterologous nucleic acid provides for a therapeutic effect.~~

17. (Previously presented) The method of claim 16, wherein said administering of said preparation is by way of direct injection into a muscle cell of said mammalian subject.

18. (Previously presented) The method of claim 17, wherein said muscle cell is a skeletal muscle cell.

19. (Previously presented) The method of claim 16, wherein said administering of said preparation is by way of administration to a vascular conduit of said mammalian subject.

20. (Previously presented) The method of claim 19, wherein said vascular conduit is a vein.

21. (Previously presented) The method of claim 19, wherein said vascular conduit is an artery.